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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,549	07/20/2006	Martijn Schimmer	3135-053021	4397
	7590 07/25/200 AW FIRM, P.C.	EXAMINER		
700 KOPPERS	BUILDING		WANG, JACK K	
436 SEVENTH AVENUE PITTSBURGH, PA 15219			ART UNIT	PAPER NUMBER
			2612	
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			07/25/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comment	10/552,549	SCHIMMER ET AL.				
Office Action Summary	Examiner	Art Unit				
	JACK WANG	2612				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>22 M</u>	2008					
	action is non-final.					
	<i>,</i> —					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
closed in accordance with the practice under £	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>13 and 15-24</u> is/are pending in the ap	olication.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>13 and 15-24</u> is/are rejected.						
7) Claim(s) is/are objected to.						
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8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
·— <u> </u>	a)⊠ All b)□ Some * c)□ None of:  1.□ Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attacker with						
Attachment(s)						
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)					
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal P					
Paper No(s)/Mail Date	6)  Other:					

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### **DETAILED ACTION**

### Response to Amendment

1. Claims 1-12, and 14 Cancelled.

2. Claims 13, and 15-24 Pending.

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 13, 15-18, and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lastinger et al. (US Patent # 6,552,661 B1), and further in view of Horwitz et al. (US Patent # 6,617,962 B1).

Consider claim 13, Lastinger et al. clearly shown and discloses a system for localizing (determination of the location) articles of sports equipment (object), comprising: means for generating an energy (radio frequency) field, wherein the energy (radio frequency) field is formed by one or more pulse streams (pulse code modulation), at least one article of sport equipment (object) provided with at least one disrupting (detecting) means for locally disrupting (to locate object as in the a zone) the energy (radio frequency) field, detecting means for detecting the local disruption of the energy field, and a control unit (locator) coupled to the detecting means for localizing the article of sports equipment on the basis of the detected local disruption, wherein the means for generating the energy field are adapted to transmit pulse

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beams of a plurality of pulse streams (Column 4 lines 4-27), except wherein each pulse beam

comprises nine pulse streams oriented at least substantially parallel to each other.

Horwitz et al. teaches a system for multi-standard RFID tags discloses the wherein at least two pulse streams of a pulse beam are oriented at least substantially parallel to each other (Column 6 lines 52-61) for the benefit of provide a multi frequency capability for the reader.

Although Horwitz et al. does not specifically teach each pulse beam comprises nine pulse

streams. He does disclose the plurality radio frequency modules, which are arranged in parallel to provide a multi-frequency capability for the reader. Since the combination of familiar element

according to known methods is likely to be obvious when it does no more then yield predictable

results.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include each pulse beam comprises nine pulse streams, which pulse streams are oriented at least substantially parallel to each other as shown in Horwitz et al. in Lastinger et al. device for the benefit of provide a multi frequency capability for the reader.

Consider claim 15, Lastinger et al. clearly shown and disclose the system wherein each disrupting (determination) means is adapted to disrupt (detect) the energy field in manner that distinguishes it from other disrupting means in the system (Column 4 lines 4-19).

Consider claim 16, Lastinger et al. clearly shown and discloses the system wherein the disrupting means is adapted to reflect the pulse streams (Column 4 lines 29-36).

Consider claim 17, Lastinger et al. clearly shown and disclose the system wherein the disrupting means is adapted to influence (absorption) the pulse streams (Column 4 lines 29-36).

Consider claim 18, Lasting et al. clearly shown and discloses the similar invention except the system wherein the disrupting means is formed by a chip.

Horwitz et al. teaches the disrupting means is formed by a chip (Column 1 lines 34-38) for the benefit of comply with industrial standard in RFID technology.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the disrupting means is formed by a chip as shown in Horwitz et al., in Lastinger et al. device for the benefit of comply with industrial standard in RFID technology.

Consider claim 20, Lastinger et al. clearly shown and discloses the system wherein the system is provided with visual means (computer 110) communicating with the control unit for displaying the location of the detected disrupting means (Column 4 lines 41-51).

Consider claim 21, Lastinger et al. clearly shown and discloses the system wherein the communication between the control unit and the visual means takes place wirelessly via electromagnetic radiation (Column 4 lines 63-67 and Column 5 lines 1-11).

Consider claim 22, Lastinger et al. clearly shown and disclose the system wherein the communication between the control unit and the visual means takes place wirelessly via pulse streams (Column 4 lines 63-67 and Column 5 lines 1-14).

Consider claim 23, Lastinger et al. clearly shown and discloses a method for localizing sports equipment (objects), comprising the steps of: A) generating an energy (radio frequency) field, wherein the energy field is formed by one or more pulse beams, B) placing in the energy field at least one object or animal provided with at least one disrupting means for locally disrupting the energy field, C) detecting the local disruption (detection) of the energy (radio

frequency) field, and D) localizing the object or animal on the basis of the detected local disruption (Column 4 lines 4-29), except wherein each pulse beam comprise nine pulse streams oriented at least substantially parallel to each other.

Horwitz et al. teaches a system for multi-standard RFID tags discloses the wherein at least two pulse streams of a pulse beam are oriented at least substantially parallel to each other (Column 6 lines 52-61) for the benefit of provide a multi frequency capability for the reader. Although Horwitz et al. does not specifically teach each pulse beam comprises nine pulse streams. He does disclose the plurality radio frequency modules, which are arranged in parallel to provide a multi-frequency capability for the reader. Since the combination of familiar element according to known methods is likely to be obvious when it does no more then yield predictable results.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include each pulse beam comprises nine pulse streams oriented at least substantially parallel to each other as shown in Horwitz et al. in Lastinger et al device for the benefit of provide a multi frequency capability for the reader.

Consider claim 24, Lastinger et al. clearly shown and discloses the method, wherein the method is provided with a step E) comprising of visualizing the location of the article of sports equipment (object) after localizing the article of sports equipment (object) on the basis of the detected local disruption as according to step D) (Column 4 lines 41-51).

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lastinger et al. (US Patent # 6,552,661 B1) in view of Horwitz et al. (US Patent # 6,617,962 B1) as applied to

claim 18 above, and further in view of Orenstein et al. (US Patent # 5,976,038) (Already of record).

Consider claim 20, Lastinger et al. and Horwitz et al. combined reference teaches similar invention except the system wherein the disrupting means is formed by a coating.

Orenstein et al. teaches the disrupting means is formed by a coating (Column 4 lines 5-17) for the benefit of reflecting the energy towards the receiving antenna.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the disrupting means is formed by a coating as shown in Orenstein et al., in Lastinger et al. and Horwitz et al. combined device for the benefit of reflecting the energy towards the receiving antenna.

# Response to Arguments

- 6. Applicant's arguments, see remark, filed 5/22/2008, with respect to claim objections have been fully considered and are persuasive. The objections of claims 13-24 has been withdrawn.
- 7. Applicant's arguments, with respect to U.S.C. § 112, second paragraph have been fully considered and amended in the manner suggested in the Office Action. Accordingly, the 35 U.S.C § 112 second paragraph rejection of claim 15 has been withdrawn.
- 8. Applicant's arguments filed 5/22/2008 have been fully considered but they are not persuasive.
- 9. With respect to 13, 15-18, and 20-24. Applicant argues that Lastinger is directed to a zone-based identification system that uses radio frequencies to determine whether a specific object is located within a certain zone. The system includes a receiver and a plurality of identification devices which are attached to different objects within the system. As admitted in

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the Office Action, Lastinger does not teach or suggest using pulse beams having multiple pulse streams oriented substantially parallel to one another.

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Horwitz is directed to a reader for a radio-frequency identification (RFID) system that is capable of simultaneously reading multiple tags operating at different frequencies. The reader includes a different module for each of the available frequencies. Each of the modules receives a return signal from a corresponding RFID tag and converts the signal into a pulse signal which can be interpreted and analyzed by the reader. Horwitz is cited in the Office Action as teaching at least two pulse streams which are oriented parallel to one another for the purpose of providing the reader with multi-frequency Capacity. However, as stated in the Office Action, Horwitz, whether alone or in combination with Lastinger, fails to teach or suggest the use of pulse beams comprising nine pulse streams which are oriented substantially parallel to one another. The examiner respectfully disagrees. The Lastinger teaches the system which for tracking persons, animals, and object (Column 1 lines 13-18). It is in the same field of endeavor as claimed invention, which relates to a method for localizing objects or animals using such a localization system. As admitted in the prior Office Action, Lastinger does not teach the using multiple pulse beams nor each pulse beams comprises nine pulse streams. However, Horwitz teaches the multiple frequency module for interrogating the respective types of tags and for receiving the information transmitted by the tags to the respective radio frequency modules by arrange the radio frequency module in parallel (Column 6 lines 52-61). Although Horwitz et al. does not specifically teach each pulse beam comprises nine pulse streams. He does disclose the plurality radio frequency modules, which are arranged in parallel to provide a multi-frequency capability

for the reader. Since the combination of familiar element according to known methods is likely to be obvious when it does no more then yield predictable results.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, The Lastinger and Horwitz combined references teaches the limitation presented by applicant regarding the use of pulse beams comprising nine pulse streams which are oriented substantially parallel to one another.

#### Terminal Disclaimer

10. The terminal disclaimer filed on 5/28/2008, with respect to Double Patenting rejection has been fully considered and are acceptable. The double patenting rejection of claims has been withdrawn.

#### Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACK WANG whose telephone number is (571)272-1938. The examiner can normally be reached on M-F 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JKW/

/Jeff Hofsass/

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Supervisory Patent Examiner, Art Unit 2612